

Study Programme: Civil Engineering			
Course Unit Title: Bridges			
Course Unit Code: GG701			
Name of Lecturer(s): Rašeta Andrija, Džolev Igor, Trivunić Milan			
Type and Level of Studies: master			
Course Status (compulsory/elective): elective			
Semester (winter/ summer): winter			
Language of instruction: english			
Mode of course unit delivery (face-to-face/distance learning): face-to-face			
Number of ECTS Allocated: 6			
Prerequisites: none			
Course Aims:. Introducing students with the elements necessary for the design, construction and management of bridges.			
Learning Outcomes: Getting to know the bridges. The acquired knowledge is used in professional subjects that follow and in engineering practice.			
Syllabus. Definition of the bridge. General terms and terminology. Historical development of bridges. Types of bridge building materials. Division of bridges. Basic requirements for the design of bridges: functionality, aesthetics, economy and reliability (safety, serviceability and durability). Bases for design of bridges (terms of reference): spatial and urban planning, transportation, surveying, geological, geotechnical, hydrological, hydro, meteorological and seismological. Elements of disposition of road, rail and pedestrian bridges. Actions on bridges. Elements of bridge construction. Getting to know the types of bridge construction methods: girder bridges, bridges framework, integral bridges, arched bridges, cable-stayed bridges and suspension bridges. Bridge equipment. In general, the construction and management of bridges.			
Required Reading: Relevant literature in English, tbd			
Weekly Contact Hours:2		Lectures: 2	Practical work: 2
Teaching Methods: Lectures. Practical exercises. Consultations. Presentation of the project.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Attendance			
Computer exercises			
Tests (4x)			

